What is claimed is:

1. An objective lens for an optical pick-up that converges a parallel light beam incident thereon onto a recording layer of an optical medium, said objective lens comprising:

a single glass plano-convex lens having a convex surface at the incident side of the parallel light beam and a flat surface at the side of said optical medium, thereby keeping numerical aperture not less than 0.7.

- 2. The objective lens according to claim 1, wherein the refractive index of said glass is not smaller than 1.6.
- 3. The objective lens according to claim 1, wherein said plano-convex lens is made through glass molding process with a pair of dies that correspond said convex and flat surfaces, respectively.
- 4. The objective lens according to claim 1, wherein said plano-convex lens is provided with an outer flange formed around the edge thereof (to be held by a fine actuator that drives said plano-convex lens in the optical axis direction.
- 5. An optical pickup, comprising:
 a light source that emits a light beam;

an objective lens that converges said light beam emitted from said light source onto a recording layer of an optical medium, said objective lens comprising a single glass plano-convex lens having a convex surface at the incident side of the parallel light beam and a flat surface at the side of said optical medium, thereby keeping numerical aperture not less than 0.7; and

a magnetic coil for applying a magnetic field to said optical medium, said magnetic coil is arranged on said flat surface of said objective lens.